

IN THE CLAIMS:

Applicants, pursuant to revised 37 C.F.R. § 1.121, submit the following amendments to the claims:

1. (Currently amended) An isolated polypeptide comprising the an-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:14 and 19-28, and polymorphism-comprising fragments thereof of about 50 to 79 contiguous residues in length, wherein the polypeptide binds to the extracellular domain (ECD) of HER-2 with an affinity binding constant of at least 10^8 M^{-1} , and wherein the fragments comprise the respective polymorphic amino acid positions of the corresponding SEQ ID NOS:14 and 19-28.

2. (Previously presented) The isolated polypeptide of claim 1, wherein the isolated polypeptide is from about 69 to 79 contiguous residues in length.

3. (Currently amended) The isolated polypeptide of claim 1, wherein the isolated polypeptide comprises the an-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:14 and 19-28.

4-7 (Cancelled).

8. (Currently amended) An isolated polypeptide comprising the an-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:15 and 29-38, and polymorphism-comprising fragments thereof of about 80 to 419 contiguous residues in length, wherein the C-terminal 79 contiguous amino acids are present, wherein at least one N-linked glycosylation site is present, and wherein the polypeptide binds to the extracellular domain (ECD) of HER-2 with an affinity binding constant of at least 10^8 M^{-1} , and wherein the fragments comprise the respective polymorphic amino acid positions of the corresponding SEQ ID NOS:15 and 29-38.

9. (Previously presented) The isolated polypeptide of claim 8, wherein the isolated polypeptide is from about 350 to 419 contiguous residues in length and at least three N-linked glycosylation sites are present.

10. (Currently amended) The isolated polypeptide of claim 8, wherein the isolated polypeptide comprises the an-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:15 and 29-38.

11-17 (Cancelled).

18. (Currently amended) A pharmaceutical composition for treating solid tumors that overexpress HER-2, comprising an agent selected from the group consisting of: (a) an isolated polypeptide comprising the aa-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:14 and 19-28, and polymorphism-comprising fragments thereof of about 50 to 79 contiguous residues in length, wherein the polypeptide binds to the extracellular domain (ECD) of HER-2 with an affinity binding constant of at least 10^8 M^{-1} , and wherein the fragments comprise the respective polymorphic amino acid positions of the corresponding SEQ ID NOS:14 and 19-28; (b) an isolated polypeptide comprising the aa-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:15 and 29-38, and polymorphism-comprising fragments thereof of about 80 to 419 contiguous residues in length, wherein the C terminal 79 contiguous amino acids are present, wherein at least one N-linked glycosylation site is present, and wherein the polypeptide binds to the extracellular domain (ECD) of HER-2 with an affinity binding constant of at least 10^8 M^{-1} , and wherein the fragments comprise the respective polymorphic amino acid positions of the corresponding SEQ ID NOS:15 and 29-38; (c) a monoclonal antibody that binds to the extracellular domain (ECD) of HER-2; and (d) combinations thereof, and a pharmaceutically acceptable carrier, with the proviso that where the composition comprises the monoclonal antibody it also comprises at least one of the agents of (a) or (b).

19. (Currently amended) The pharmaceutical composition of claim 18, wherein the agent is the isolated polypeptide comprising the aa-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:14 and 19-28, and polymorphism-comprising fragments thereof of about 50 to 79 contiguous residues in length.

20. (Currently amended) The pharmaceutical composition of claim 18, wherein the agent is the combination of the isolated polypeptide comprising the aa-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:14 and 19-28, and polymorphism-comprising fragments thereof of about 50 to 79 contiguous residues in length, and the monoclonal antibody that binds to the extracellular domain (ECD) of HER-2.

21-37 (Cancelled).

38. (Currently amended) An isolated polypeptide consisting of the ~~an~~-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:14 and 19-28.

39. (Currently amended) An isolated polypeptide consisting of the ~~an~~-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:15 and 29-38.

40. (Currently amended) The pharmaceutical composition of claim 18, wherein the agent is the isolated polypeptide comprising an amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:15 and 29-38, and polymorphism-comprising fragments thereof of about 80 to 419 contiguous residues in length.

41. (Currently amended) The pharmaceutical composition of claim 18, wherein the agent is the combination of the isolated polypeptide comprising the ~~an~~-amino acid sequence selected from the group consisting of polymorphic SEQ ID NOS:15 and 29-38, and polymorphism-comprising fragments thereof of about 80 to 419 contiguous residues in length, and the monoclonal antibody that binds to the extracellular domain (ECD) of HER-2.

42. (Currently amended) An isolated polypeptide comprising the ~~an~~-amino acid sequence selected from the group consisting of polymorphic SEQ ID NO:14, and polymorphism-comprising fragments thereof of about 50 to 79 contiguous residues in length, wherein the polypeptide binds to the extracellular domain (ECD) of HER-2 with an affinity binding constant of at least 10^8 M^{-1} .

43. (Previously presented) The isolated polypeptide of claim 42, wherein the isolated polypeptide is from about 69 to 79 contiguous residues in length.

44. (Previously presented) The isolated polypeptide of claim 42, wherein the isolated polypeptide comprises SEQ ID NO:14.

45. (Previously presented) An isolated polypeptide consisting of SEQ ID NO:14.

46. (Currently amended) An isolated polypeptide comprising an amino acid sequence selected from the group consisting of polymorphic SEQ ID NO:15, and polymorphism-comprising fragments thereof of about 80 to 419 contiguous residues in length, wherein the C-terminal 79 contiguous amino acids are present, wherein at least one N-linked glycosylation site is present, and wherein the polypeptide binds to the extracellular domain (ECD) of HER-2 with an affinity binding constant of at least 10^8 M^{-1} .

47. (Previously presented) The isolated polypeptide of claim 46, wherein the isolated polypeptide is from about 350 to 419 contiguous residues in length and at least three N-linked glycosylation sites are present.

48. (Previously presented) The isolated polypeptide of claim 46, wherein the isolated polypeptide comprises SEQ ID NO:15.

49. (Previously presented) An isolated polypeptide consisting of SEQ ID NO:15.